ocket No.: 50229-420

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

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Customer Number: 20277

Grace JONES, et al.

Confirmation Number: 9113

PATENT

Application No.: 10/719,024

Group Art Unit: 1614

Filed: November 24, 2003

Examiner: Not yet assigned

For: MUTANTS AND ASSAY SYSTEM TO IDENTIFY USP/RXR LIGANDS

INFORMATION DISCLOSURE STATEMENT

Mail Stop Amendment Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Dear Sir:

In accordance with the provisions of 37 C.F.R. 1.56, 1.97 and 1.98, the attention of the Patent and Trademark Office is hereby directed to the documents listed on the attached form PTO-1449. It is respectfully requested that the documents be expressly considered during the prosecution of this application, and that the documents be made of record therein and appear among the "References Cited" on any patent to issue therefrom.

This Information Disclosure Statement is being filed within three months of the U.S. filing date OR before the mailing date of a first Office Action on the merits. No certification or fee is required.

Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 500417 and please credit any excess fees to such deposit account.

Respectfully submitted,

McDERMOTT WILL & EMERY LLP

Please recognize our Customer No. 20277

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Date: November 10, 2004

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INFORMATION DISCLOSURE CITATION IN AN APPLICATION			ATTY. DOCKET NO. 50229-420 SERIAL NO. 10/719,024						
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				U.S. PATEN	T DOCUMENTS				
EXAMINER'S INITIALS	CITE NO.		t Number Code2 (4 known)	Publication Date MM-DD-YYYY	Name of Patentee or Applic Document	cant of Cited	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear		
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SHS			In	sect Blochemistr	ndent conformational changes y and Molecular Biology 32 (200	11), pp. 33-49			
1		G. JONES, et al. "Ultraspiracie: An invertebrate nuclear receptor for juvenile hormones" Biochemistry, Proc. Natl. Acad. Sci. USA, Vol. 94, pp.13499-13503, December 1997							
		M. HARMO	M. HARMON, et al. "Activation of mammalian retinoid X receptors by the insect growth regulator methoprene" Biochemistry, Proc. Natl. Acad. Sci. USA, Vol. 92, pp.6157-6160, June 1995						
		Y. XU, et al. "Activation of transcription through the ligand-binding pocket of the orphan nuclear receptor ultraspiracle" Eur. J. Biochem., 269, pp. 6026-6036 (2002), FEBS							
		M. LEZZI, et al. "The Ecdysone Receptor Puzzle" Archives of Insect Biochemistry and Physiology 41: 99-106, Wiley- Liss, Inc. 1999							ley-
		H. T. TRAN, et al. "Requirement of co-factors for the ligand-mediated activity of the insect ecdysteroid receptor in yeast" Journal of Molecular Endocrinology (2001) 27, pp. 191-209, Society for Endocrinology							
		T. DHADIALLA, et al. "New Insecticides with Ecdysteroidal and Juvenile Hormone Activity" Annual Review of Entomology, 1998, 43: pp.545-569							
		EGEA, et al. "Crystal structure of the human RXRα ligand-binding domain bound to its natural ligand: 9-cis retinoic acid" The EMBO Journal, Volume 19, number 11, June 1, 2000, pp. 2592-2601							
		G. JONES, et al. "Considerations on the structural evidence of a ligand-binding function of ultraspiracle, an insect homolog of vertebrate RXR" Insect Biochemistry and Molecular Biology 30 (2000), pp. 671-679							
		I. BILLAS, et al. "Crystal Structure of the Ligand-binding Domain of the ultraspiracle Protein USP, the Ortholog of Retinoid X Receptors in Insects" The Journal of Biological Chemistry, Vol. 276, No. 10, Issue of March 9, pp. 7465-7474, 2001							
		G. CLAYTON, et al. "The structure of the ultraspiracle ligand-binding domain reveals a nuclear receptor locked in an inactive conformation" PNAS, February 13, 2001, vol. 98, no. 4, pp. 1549-1554							
		BOGAN, et al. "Natural ligands of nuclear receptors have conserved volumes" nature structural biology, vol. 5, no. 8, August 1998, pp. 679-681							o. 8,
		R. NOTLE, et al. "Ligand binding and co-activator assembly of the peroxisome proliferators-activated receptor-u" Nature, vol. 395, September 10, 1998, pp. 137-143							
$\neg V$		S. KLIEWER, et al. "A Prostaglandin J ₂ Metabolite Binds Peroxisome Proliferator-Activated Receptor u and Promotes Adipocyte Differentiation" Cell, Vol. 83; December 1, 1995, pp. 813-819						otes	
		EXAMINER				DATE CONSI	DERED		

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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U.S. PATENT DOCUMENTS								
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EXAMINER'S INITIALS	CITE NO.	Foreign Patent Document Country Codes-Number 4-Kind Codes (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines Where Relevant Figures Appear		Translation	
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INITIALS	CITE NO.			ge(s), volume-issue number(s), p				•
SHS		A. BRZOZOWSKI, et al. "Molecular basis of agonism and antagonism in the oestrogen receptor" Nature, Vol. 389, October 16, 1997, pp. 753-758						
1	A. SHIAU, et al. "The Structural Basis of Estrogen Receptor/Coactivator Recognition and the Antagonism of This Interaction by Tamoxifen" Cell, Vol. 95, December 23, 1998, pp. 927-937							8
	R. WATKINS, et al. "The Human Nuclear Xenoblotic Receptor PXR: Structural Determinants of Directed Promisculty" Science, Vol. 292, June 22, 2001, pp. 2329-2333							ity"
	G. JONES, et al. "Identification of regulatory sequences of juvenile hormone-sensitive and ⊣nsensitive serum protein-encoding genes" Gene, 173, pp. 209-214, 1996							
	G. JONES, et al. "Transcription of the juvenile hormone esterase gene under the control of both an initiator and AT- rich motif" Biochem. J. (1998) Volume 335 part 1, pp. 79-84							
	G. JONES, et al. "Regulation of the juvenile hormone esterase gene by a composite core promoter" Blochemical Journal, Volume 346, Part 1, February 15, 2000, pp. 233-240							
	D'AVINO, et al. "The moulting hormone ecdysone is able to recognize target elements composed of direct repeats" Molecular and Cellular Endocrinology, Vol. 113, No. 1, August 30, 1995, pp. 1-9							
	A. STEINMETZ, et al. "Binding of Ligands and Activation of Transcription by Nuclear Receptors" Annual Review ofBiophysics and Biomolecular Structure, Volume 30, 2001, pp. 329-359							
	S. KERSTEN, et al. "On the Role of Ligand in Retinoid Signaling: Positive Cooperativity in the interactions of 9-cis Retinoic Acid with Tetramers of the Retinoid X Receptor" Blochemistry 1995, Volume 34, pp. 14263-14269							
		S. STRUGNELL, et al. "Bacterial Expression and Characterization of the Ligand-Binding Domain of the Vitamin D Receptor" Archives of Biochemistry and Biophysics, Volume 364, Issue 1, pp. 42-52						
	J. LUPISELLA, et al. "The Ligand Binding Domain of the Human Retinoic Acid Receptor u is Predominantly α-Helical with a Trp Residue in the Ligand Binding Site" The Journal of Biological Chemistry, Volume 270, Number 42, October 20, 1995, pp. 24884-24890							
		J. REID, et al. "Conformational Analysis of the Androgen Receptor Amino-terminal Domain Involved in the Transactivation" The Journal of Biological Chemistry, Volume 277, Number 22, May 31, 2002, pp. 20079-20086						
V	M. SCHIMERLIK, et al. "Kinetic and Thermodynamic Analysis of 9-c/s-Retinoic Acid Binding to Retinoid X Receptor α" Blochemistry, Volume 38, Issue 21, May 1999, pp. 6732-6740							tor
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